

ABSTRACT

Method and device for filtering a video signal received by a secondary radar, particularly in order to eliminate mode S replies

The invention applies to secondary radars. It makes it possible to carry out filtering when seeking to detect SSR responses, these SSR responses being overlapped by a mode S response. According to the invention, the pulses of the mode S response are filtered without filtering the pulses of the SSR responses which are of a higher level than the mode S response.

For this purpose, the subject of the invention is in particular a method for filtering a video signal, the video signal being received by a secondary radar, the filtering being designed to precede the detection of SSR responses, the received signal comprising samples intended to be analyzed according to the method, in which method for a sample under analysis :

- at least one instantaneous power (S_4) of the received signal is estimated (T_1), the power being estimated on the basis of determined signal samples, said samples at least leading or lagging by a duration greater than a duration T with respect to the sample under analysis, the duration T being the duration of an SSR response ;
- a threshold (S_5) is determined, the threshold being at least equal to the estimated power ;
- if the power of the sample under analysis (S_1') is less than the threshold, the sample is filtered.

figure 4